









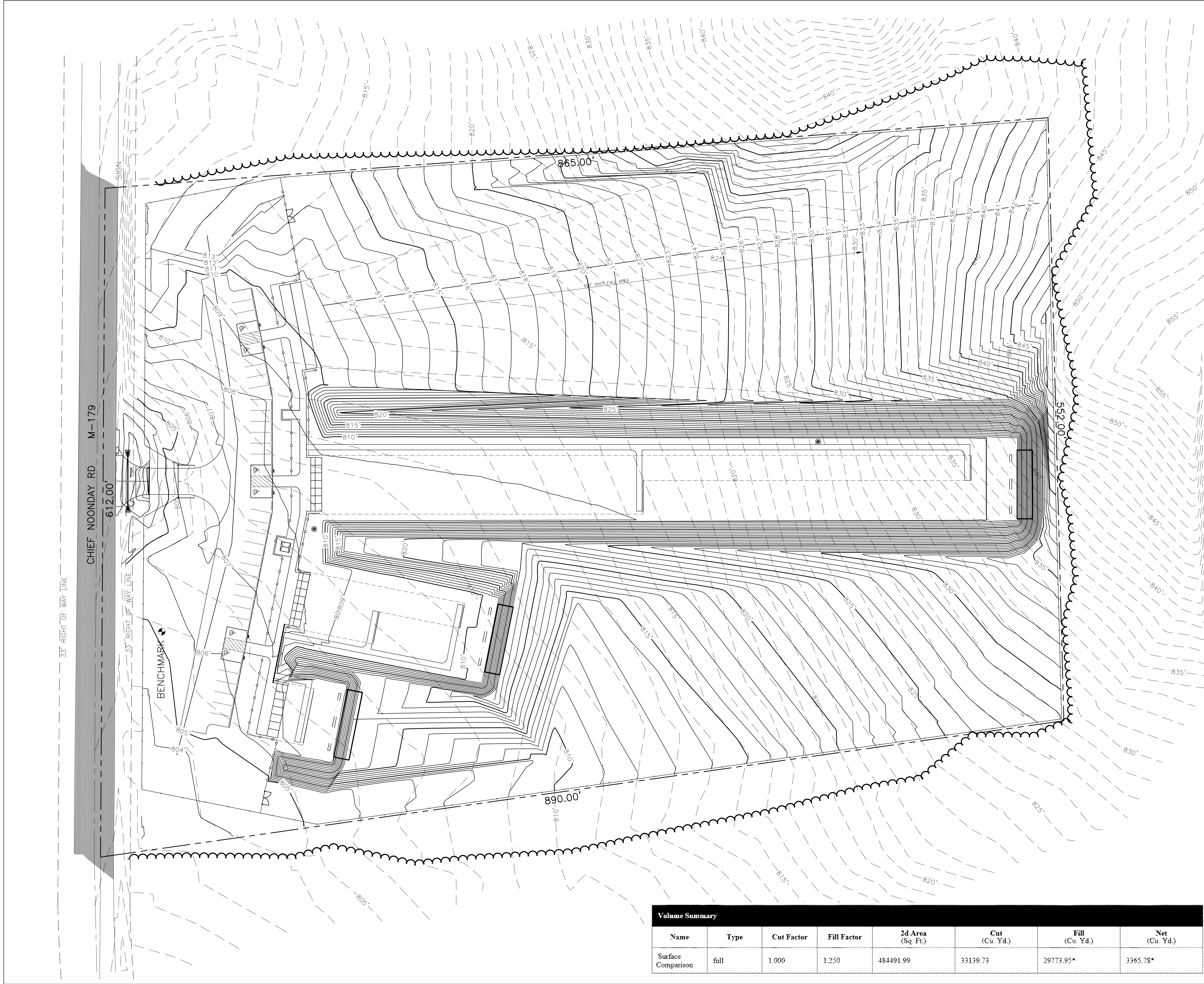


LEGEND

	EXISTING SANITARY SEWER
	EXISTING SAN. CLEAN OUT
	EXISTING WATER MAIN
	EXISTING STORM SEWER
	EX. R.Y. CATCH BASIN
	EXISTING BURIED CABLES
	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN



STEWARDSHIP / ARTIFACT NOTE

IF ANY ARTIFACTS ARE DISCOVERED DURING THE CONSTRUCTION PROCESS, ALL WORK IS TO STOP AND THE OWNER'S REPRESENTATIVE PROJECT MANAGER SHALL BE NOTIFIED. ARTIFACTS OR ARCHEOLOGICAL MATERIALS ARE DEFINED AS: ABORIGINAL ANTIQUITIES AND OTHER RECORDS ON ANTIQUITY, INCLUDING MOUNDS, MINES, EARTHWORKS, VILLAGE SITES, CAMP SITES, BURIALS, HUMAN OR OTHER BONES, SHELLS, STONE IMPLEMENTS, BONE OR COPPER IMPLEMENTS, POTTERY OR SHARD OF POTTER, OR OTHER OBJECTS RELATING TO NATIVE AMERICAN OCCUPATION, AND MODERN ARTIFACTS, SUCH AS FORTS, RELICS, AND OTHER ARTIFACTS RELATING TO THE HISTORIC, COLONIAL, TERRITORIAL AND EARLY STATEHOOD PERIODS.

SOIL EROSION NOTE

ALL WORK UNDER THIS CONTRACT MUST MEET THE STORM WATER MANAGEMENT REQUIREMENTS OF THE PROJECT AND COMPLY WITH THE APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL (SESC) RULES AND REGULATIONS (SOIL EROSION AND SEDIMENTATION CONTROL 1994 PA 451, PART 91, AS AMENDED, MCL 324.9101) AND SPECIFIC PROVISIONS AND REGULATIONS FOR SAME WITHIN THE CONTRACT DOCUMENTS. THE DEPARTMENT OF MANAGEMENT AND BUDGET, FACILITIES ADMINISTRATION, AN AUTHORIZED PUBLIC AGENCY (APA), HAS PROMULGATED STANDARD PROCEDURES AND SPECIFICATIONS FOR EROSION CONTROL THAT SHALL BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS. SESC MEASURES WILL BE MONITORED AND ENFORCED BY FACILITIES ADMINISTRATION THROUGH THE REVIEW OF THE CONTRACTOR'S IMPLEMENTATION PLANS AND SITE INSPECTIONS. FACILITIES ADMINISTRATION OR THE PROFESSIONAL WILL NOTIFY THE CONTRACTOR IN WRITING OF ANY VIOLATIONS OF THE APPLICABLE SESC STATUTES AND / OR THE CORRECTIVE ACTIONS UNDERTAKEN BY THE OWNER AND MAY ISSUE STOP WORK ORDERS. FACILITIES ADMINISTRATION HAS THE RIGHT TO ASSESS A FINE TO THE CONTRACTOR FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE CONTRACT DOCUMENTS AND / OR SESC REGULATIONS APPLICABLE TO THIS WORK AND FINES SHALL BE IN ADDITION TO ANY REMEDIATION COSTS OR LIQUIDATED DAMAGES APPLICABLE TO THE PROJECT AND MAY EXCEED THE VALUE OF THE CONTRACT.

SOIL EROSION CONTROL

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT, EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SEDIMENT RESULTING FROM ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE THAT WATER LEAVES THE SITE.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

Volume Summary							
Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Surface Comparison	fill	1.000	1.250	484491.99	33139.73	29773.95*	3365.78*

CHIEF NOONDAY RD M-179

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CIVIL ENGINEER
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LAND PLANNERS

4677 WOODWARD AVENUE
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STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
STATE FACILITIES ADMINISTRATION
DESIGN AND CONSTRUCTION DIVISION
ADAM P. LACH, RA, NCARB, DIRECTOR

DATE
12/15/21
Phase 500 - 50%
Review

PROJECT DESCRIPTION
BARRY STATE GAME AREA
SHOOTING RANGE DEVELOPMENT

SITE GRADING PLAN

PROJECT NO. 10654
INDEX XXXXX
PCA XXX-XXXX
DRAWN BY K. RUITER
DESIGNED BY K. RUITER
JCING BY S. SUTTON

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